

# Designing AAC for Community Engagement

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# Background



# Social Context of Assistive Technology (AT)

- AT often designed for **functional** accessibility over **social** accessibility
  - Social Accessibility: *“something that serves as a vehicle for conveying both ability and social identity”*
  - [\(Shinohara & Wobbrock, 2016\)](#)
- Use of AT can impact social engagement and perception
  - [\(Shinohara & Wobbrock, 2016\)](#)
  - AT breakdowns can cause unwanted attention and/or embarrassment
- Users of AT experience misperceptions, such as being helpless
  - [\(Shinohara & Wobbrock, 2011\)](#)



# Social Context of AAC

- AAC can limit personality expression, social communication (e.g., telling stories/jokes), and communication in public settings
  - [\(Kane, Morris, Paradiso, & Campbell, 2017\)](#)
- AAC can help with community engagement, but effective communication is needed
  - [\(Cooper, Balandin, & Trembath, 2009\)](#)
- Some AAC designs take inspiration from public communication (e.g., eating at a restaurant)
  - [\(McCoy, Bedrosian, & Hoag, 2010\)](#)




Utterance-based AAC design for eating at a restaurant (McCoy et al., 2010)

**How can AAC be designed to  
support community  
engagement?**

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# Proposed Study



# Preliminary Study - Scoping Review

- Systematic literature review on AAC and community engagement
- Search for:
  - Populations studied
  - AAC systems used
  - System design considerations
- **What work does the extant literature show has been done in designing AAC for community engagement?**
  - Set the stage for the next study





# Main Study - Semi-Structured Interview

- **Goal:** gather qualitative data from people who use AAC
- **Collect data on:**
  - Definitions of community engagement
  - The positive/negative impacts of their AAC system
  - Desired system changes



## Example Interview Questions

- How would you define *community*?
- How would you define *your* community?
- Does your AAC system help you engage with your community?
  - If so, how does it help?
- Does your AAC system hinder you from engaging with your community?
  - If so, how does it hinder?
- What about your AAC system helps you engage with your community?
- What about your AAC system hinders you from engaging with your community?



# Use of Data

- **Data Collected:**
  - Demographics
  - Details of current AAC system(s)
  - Conversational responses from participants
  
- Create a working definition of *community* and *community engagement*
- Discover guiding principles for AAC designs that will support community engagement



# Future Work

- Use definitions and guiding principles to develop new AAC system designs targeted towards supporting and enhancing community engagement
  - Proof-of-concept and design validation
  - Intervention with new design



# Discussion

**How to choose a population to be interviewed in this study?**

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**How to create a definition for  
“community engagement”?**

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